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Sequence Listing was accepted.

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Reviewer: Anne Corrigan

Timestamp: [year=2009; month=6; day=1; hr=14; min=38; sec=31; ms=696;]

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Application No: 10520033

Version No: 5.0

Input Set:**Output Set:****Started:** 2009-05-22 16:09:22.042**Finished:** 2009-05-22 16:09:26.512**Elapsed:** 0 hr(s) 0 min(s) 4 sec(s) 470 ms**Total Warnings:** 24**Total Errors:** 0**No. of SeqIDs Defined:** 30**Actual SeqID Count:** 30

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Input Set:

Output Set:

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Error code

Error Description

This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

<110> Chan, Lia Raquel
Gonzalez, Daniel H.
Dezar, Carlos A.
Gago, Gabriela Marisa
Dunan, Claudio Marcelo

<120> Transcription Factor Gene Induced by Water Deficit Conditions and
Absciscic Acid from Helianthus Annuus, Promoter and Transgenic Plants

<130> 2510.0040000/JAG/SAC

<140> 10520033

<141> 2009-05-22

<150> PCT/US2003/013770

<151> 2003-05-02

<160> 30

<170> PatentIn version 3.1

<210> 1

<211> 774

<212> DNA

<213> Helianthus annuus

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 aaacgattta ccgacaaaca aataagtttc ctagagtaca tgtttgagac acagtcgaga 180
 cccgagttaa ggatgaaaca ccagttggca cataaactcg ggcttcatcc tcgtcaagtg 240
 gcgatatggt tccagaacaa acgcgcgcga tcaaagtcga ggcagattga gcaagagtat 300
 aacgcgctaa agcataacta cgagacgctt gcgtctaat ccgagtctct aaagaaagag 360
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 ggaaacagtt tgttggagat tgaagaacaa ctgccagacc ctcaaaagtg gtgggagttc 600
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 gtttacactt tgt 673

<210> 3
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 <212> DNA
 <213> *Helianthus annuus*

<220>
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 <222> (1)..(1221)
 <223> Large allele

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<210> 4
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<400> 4	
gcgaagcttg atgcgaacga gtggttta	28

<210> 5
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 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 5	
gcggtcgaca cctggcacat cgtatctt	28

<210> 6
 <211> 27
 <212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide having a Bam HI site

<400> 6
cgcggatccg agggtttgat aagtgat 27

<210> 7
<211> 27
<212> DNA
<213> Artificial Sequence

<220>

<223> Designed oligonucleotide having a Hind III site

<400> 7
cccaagctta acctaagtcc gcctttg 27

<210> 8
<211> 27
<212> DNA
<213> Artificial Sequence

<220>

<223> Designed oligonucleotide having a Hind III site

<400> 8
ggcaagctta tctcaaccga aagtgac 27

<210> 9
<211> 19
<212> DNA
<213> Artificial Sequence

<220>

<223> Designed oligonucleotide based on the 5' promoter

<400> 9
atttcgcaag tagtcatt 19

<210> 10
<211> 1015
<212> DNA
<213> Helianthus annuus

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accacgcta tgtccacttg tacttttgtt tgcacacaac tcttcccata aaatatcaaa	240
ccaaattttt tttaatggaa aacaaatact tcaaatgcac tattggtgaa attcaccaca	300
tcagaataca cccgtctcta ctcatctact ggccaacgaa tcttcacggg ggaaaccctc	360
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gggggcgga attgaaccta ggtccagtgg cgcacccatg aatttttttt ctagggatgc	600
gaacgagtga ttttaaccata cttttaagag gtgcgatcgg aaattttacc tataaaatat	660
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gattcttgtc aaattcaacg cgtacacctg tgcttcatct aaacccata ctttaagaac	960
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 <223> Designed oligonucleotide having a Bam HI site

<400> 11	
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<210> 12
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed oligonucleotide having a Bam HI site

<400> 12	
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<210> 13
 <211> 34
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Designed oligonucleotide having a Xho I site

<400> 13
gaggactcga gctcaagttt tttttttttt tttt 34

<210> 14
<211> 18
<212> DNA
<213> Artificial Sequence

<220>

<223> Designed Oligonucleotide having a Xho I site

<400> 14
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<210> 15
<211> 29
<212> DNA
<213> Artificial Sequence

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<223> Designed oligonucleotide having an Eco RI site

<400> 15
gccgaattca gattgagcaa gagtataac 29

<210> 16
<211> 19
<212> DNA
<213> Artificial Sequence

<220>

<223> Designed oligonucleotide based on the promoter

<400> 16
acctttataa agaccactc 19

<210> 17
<211> 19
<212> DNA
<213> Artificial Sequence

<220>

<223> Designed oligonucleotide based on the promoter

<400> 17
acgcaatggg gagttgtac 19

<210> 18
<211> 24

<212> DNA
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 <220>
 <223> Designed oligonucleotide to DNA-binding assays

 <400> 18
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 <210> 19
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Designed oligonucleotide to DNA-binding assays

 <400> 19
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 <210> 20
 <211> 30
 <212> DNA
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 <220>
 <223> Designed Oligonucleotide having a Bam HI site

 <400> 20
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 <210> 21
 <211> 30
 <212> DNA
 <213> Artificial Sequence

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 <223> Designed Oligonucleotide having a Sac I site

 <400> 21
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 <210> 22
 <211> 27
 <212> DNA
 <213> Artificial Sequence

 <220>
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 <400> 22
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<210> 23
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 <212> DNA
 <213> Helianthus annuus

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 <222> (5)..(5)
 <223> n is a or t

<400> 23
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9

<210> 24
 <211> 181
 <212> PRT
 <213> Helianthus annuus

<400> 24

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Arg Asn Glu Gly Arg Lys Arg Phe Thr Asp Lys Gln Ile Ser Phe Leu
 20 25 30

Glu Tyr Met Phe Glu Thr Gln Ser Arg Pro Glu Leu Arg Met Lys His
 35 40 45

Gln Leu Ala His Lys Leu Gly Leu His Pro Arg Gln Val Ala Ile Trp
 50 55 60

Phe Gln Asn Lys Arg Ala Arg Ser Lys Ser Arg Gln Ile Glu Gln Glu
 65 70 75 80

Tyr Asn Ala Leu Lys His Asn Tyr Glu Thr Leu Ala Ser Lys Ser Glu
 85 90 95

Ser Leu Lys Lys Glu Asn Gln Ala Leu Leu Asn Gln Leu Glu Val Leu
 100 105 110

Arg Asn Val Ala Glu Lys His Gln Glu Lys Thr Ser Ser Ser Gly Ser
 115 120 125

Gly Glu Glu Ser Asp Asp Arg Phe Thr Asn Ser Pro Asp Val Met Phe
 130 135 140

Gly Gln Glu Met Asn Val Pro Phe Cys Asp Gly Phe Ala Tyr Phe Glu
145 150 155 160

Glu Gly Asn Ser Leu Leu Glu Ile Glu Glu Gln Leu Pro Asp Pro Gln
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Lys Trp Trp Glu Phe
180

<210> 25

<211> 99

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Hd-Zip domain of Athb-1

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Leu Pro Glu Lys Lys Arg Arg Leu Thr Thr Glu Gln Val His Leu Leu
1 5 10 15

Glu Lys Ser Phe Glu Thr Glu Asn Lys Leu Glu Pro Glu Arg Lys Thr
20 25 30

Gln Leu Ala Lys Lys Leu Gly Leu Gln Pro Arg Gln Val Ala Val Trp
35 40 45

Phe Gln Asn Arg Arg Ala Arg Trp Lys Thr Lys Gln Leu Glu Arg Asp
50 55 60

Tyr Asp Leu Leu Lys Ser Thr Tyr Asp Gln Leu Leu Ser Asn Tyr Asp
65 70 75 80

Ser Ile Val Met Asp Asn Asp Lys Leu Arg Ser Glu Val Thr Ser Leu
85 90 95

Thr Glu Lys

<210> 26

<211> 99

<212> PRT

<213> Artificial Sequence

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<223> Synthetic Hd-Zip domain of Athb-6

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Leu Ser Glu Lys Lys Arg Arg Leu Ser Ile Asn Gln Val Lys Ala Leu
1 5 10 15

Glu Lys Asn Phe Glu Leu Glu Asn Lys Leu Glu Pro Glu Arg Lys Val
20 25 30

Lys Leu Ala Gln Glu Leu Gly Leu Gln Pro Arg Gln Val Ala Val Trp
35 40 45

Phe Gln Asn Arg Arg Ala Arg Trp Lys Thr Lys Gln Leu Glu Lys Asp
50 55 60

Tyr Gly Val Leu Lys Thr Gln Tyr Asp Ser Leu Arg His Asn Phe Asp
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Ser Leu Arg Arg Asp Asn Glu Ser Leu Leu Gln Glu Ile Ser Lys Leu
85 90 95

Lys Thr Lys

<210> 27

<211> 99

<212> PRT

<213> Artificial Sequence

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Asn Lys Asn Asn Gln Arg Arg Phe Ser Asp Glu Gln Ile Lys Ser Leu
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Glu Met Met Phe Glu Ser Glu Thr Arg Leu Glu Pro Arg Lys Lys Val
20 25 30

Gln Leu Ala Arg Glu Leu Gly Leu Gln Pro Arg Gln Val Ala Ile Trp
35 40 45

Phe Gln Asn Lys Arg Ala Arg Trp Lys Ser Lys Gln Leu Glu Thr Glu
50 55 60

Tyr Asn Ile Leu Arg Gln Asn Tyr Asp Asn Leu Ala Ser Gln Phe Glu
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Ser Leu Lys Lys Glu Lys Gln Ala Leu Val Ser Glu Leu Gln Arg Leu
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Lys Glu Ala

<210> 28

<211> 99

<212> PRT

<213> Artificial Sequence

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Lys Ser Asn Asn Gln Lys Arg Phe Asn Glu Glu Gln Ile Lys Ser Leu
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Glu Leu Ile Phe Glu Ser Glu Thr Arg Leu Glu Pro Arg Lys Lys Val
20 25 30

Gln Val Ala Arg Glu Leu Gly Leu Gln Pro Arg Gln Met Thr Ile Trp
35 40 45

Phe Gln Asn Lys Arg Ala Arg Trp Lys Thr Lys Gln Leu Glu Lys Glu
50 55 60

Tyr Asn Thr Leu Arg Ala Asn Tyr Asn Asn Leu Ala Ser Gln Phe Glu
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Ile Met Lys Lys Glu Lys Gln Ser Leu Val Ser Glu Leu Gln Arg Leu
85 90 95

Asn Glu Glu

<210> 29

<211> 99

<212> PRT

<213> Artificial Sequence

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<223> Synthetic Hd-Zip domain of Hahb-4

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20 25 30

Gln Leu Ala His Lys Leu Gly Leu His Pro Arg Gln Val Ala Ile Trp
35 40 45

Phe Gln Asn Lys Arg Ala Arg Ser Lys Ser Arg Gln Ile Glu Gln Glu
50 55 60

Tyr Asn Ala Leu Lys His Asn Tyr Glu Thr Leu Ala Ser Lys Ser Glu
65 70 75 80

Ser Leu Lys Lys Glu Asn Gln Ala Leu Leu Asn Gln Leu Glu Val Leu
85 90 95

Arg Asn Val

<210> 30

<211> 66

<212> PRT

<213> Artificial Sequence

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<223> Synthetic fragment of Hahb-4

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20 25 30

Met Asn Val Pro Phe Cys Asp Gly Phe Ala Tyr Phe Glu Glu Gly Asn
35 40 45

Ser Leu Leu Glu Ile Glu Glu Gln Leu Pro Asp Pro Gln Lys Trp Trp
50 55 60

Glu Phe

65